

SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06I-0482-01 SAF-RC-001

Rad only ☒ Chem only Rad & Chem

☒ Complete Partial

300 Area 334 Bldg

RECEIVED
APR 24 2006

EDMC



Cover Page

Page 1 of 7



Report Identification Number: 06I-0482-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R33400 J452
Payroll#: 72947

Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
01 Feb 2006	J113H8	06I03830	NMAM 7300M	G061601L	G WIPE
01 Feb 2006	J113H9	06I03831	NMAM 7300M	G061601L	G WIPE
01 Feb 2006	J113J0	06I03832	NMAM 7300M	G061601L	G WIPE
01 Feb 2006	J11394	06I03833	NMAM 7300M	G061601L	G WIPE

I certify that this electronic image and all hardcopies produced from this image accurately represent the data and are in compliance with the contract specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Name: Joanna C. Sanchez
Title: Chemist
Date: February 10, 2006

Report Identification Number: 06I-0482-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R33400 J452
Payroll#: 72947

General Set Information: There are 4 samples in set 06I-0482-01, 4 samples in set 06I-0483-01, 4 samples in set 06I-0484-01, 4 samples in set 06I-0485-01, 4 samples in set 06I-0486-01, 4 samples in set 06I-0487-01, 11 samples in set 06I-0513-01 and 22 samples in set 06I-0514-01 which were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.01 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.08 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 2. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

Dilution(s): None.

Laboratory Control Sample and Duplicate Analysis: Three Laboratory Control Samples (LCSs) and three Laboratory Control Sample Duplicates (LCSDs) were prepared and analyzed with the sample batch. The LCS results were within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCSs and the LCSDs were within the control limit of 20%.

Replicate Analysis: Six samples in this batch were replicated. The RPD between the samples and the replicates was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:

Final result for aqueous samples ($\mu\text{g}/\text{sample}$) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination ($\mu\text{g}/\text{L}$)

B = Concentration factor from sample preparation

= $\frac{\text{Final Volume of Digestate (L)}}{\text{Sample}}$

C = Dilution performed at time of analysis

Example Calculation: $(1 \mu\text{g}/\text{L}) \times (0.025 \text{ L}/\text{sample}) \times (1) = 0.025 \mu\text{g}/\text{sample}$

Miscellaneous Comments: None



Report Page

Page 4 of 7

Report Identification Number: 06I-0482-01

Subcontract Number: 0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

SAF#: RC-001 / R33400 J452

Payroll#: 72947

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Cadmium µg/sample		Lead µg/sample	
J113H8	06I03830	08 Feb 2006	<0.01	U	<0.08	U	<2.	U
J113H9	06I03831	08 Feb 2006	<0.01	U	<0.08	U	<2.	U
J113J0	06I03832	08 Feb 2006	<0.01	U	<0.08	U	<2.	U
J11394	06I03833	08 Feb 2006	<0.01	U	<0.08	U	<2.	U
Limit of Detection (LOD)			0.01		0.08		2.	
Required Detection Limit (RDL)								

U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.



QC Summary Page

Page 5 of 7

Report Identification Number: 06I-0482-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF: RC-001 / R33400 J452
Payroll#: 72947

Batch ID: G061601L

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-241024-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-241024-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
BL-241024-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
QC-241024-1	LCS	Beryllium	µg/sample	11.3	NA	10.0	113.	NA
QC-241024-1	LCS	Cadmium	µg/sample	33.5	NA	30.0	112.	NA
QC-241024-1	LCS	Lead	µg/sample	108.	NA	100.	108.	NA
QD-241024-1	LCSD	Beryllium	µg/sample	11.2	11.3	10.0	112.	0.312
QD-241024-1	LCSD	Cadmium	µg/sample	33.2	33.5	30.0	111.	0.699
QD-241024-1	LCSD	Lead	µg/sample	106.	108.	100.	106.	1.81

MB - Method Blank

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MSD - Matrix Spike Duplicate

LD - Laboratory Duplicate

NA - Not Applicable

ND - Parameter not detected above LOD

$LCS, LCSD \text{ Percent Rec.} = (\text{Result} / \text{Target}) * 100.0$

$MS, MSD \text{ Percent Rec.} = ((\text{Result} - \text{Parent}) / \text{Target}) * 100.0$

$LCS, LCSD \text{ Relative Percent Diff.} = ((|\text{LCS} - \text{LCSD}|) / ((\text{LCS} + \text{LCSD})/2.0)) * 100.$

$MS, MSD \text{ Relative Percent Diff.} = ((|\text{MS} - \text{MSD}|) / ((\text{MS} + \text{MSD})/2.0)) * 100.$

$LD \text{ Relative Percent Diff.} = ((|\text{Parent} - \text{LD}|) / ((\text{Parent} + \text{LD})/2.0)) * 100$

NT-0482-01

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST											
Collector: T. Webster		Company Contact: Dennis A. Pitts and Henry W. Ruby		Telephone No. 531-1229		Project Coordinator: Joan H. Kessler		Data Transmitted: Standard			
Payroll #: 72947		Sampling Location: 300 Area 334		SPECIAL INSTRUCTIONS: All relevant COAs must be provided: R 334003452		SAF No. RC-001		Method of Shipment: Fed Ex			
Type of Sample: Belphical wipe		Wipe Sample Media: Other <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		ANALYSIS METHOD (SPECIFIC): NIOSH 7800 - Belphical		Bill of Lading/Air Bill No. 8544 9435 4737					
Shipped To: DataChem Salt Lake City, UT		PRESERVE SAMPLE HAZARD MARKS: Belphical		Special Handling and/or Storage: na							
SAMPLE ANALYSIS											
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area (sq ft)	Comments	Adhesive Airborne	Lead Airborne	Beryllium Wipe	Lead Wipe	Cd Wipe	No	No
J11348	w1	2/1/06	X	na			X	X	X		
J11349	w1	2/1/06	X	na			X	X	X		
J11350	w1	2/1/06	na	blank			X	X	X		
J11394	w1	2/1/06	na	blank			X	X	X		
2/2/06											

Page 1 of 2

WCH-SH-202 (06/29/2005)

Page 2 of 2

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

[illegible]

Enter on line below the first Sample Number from Page One:

011348

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
SIGN / PRINT NAMES / USE MILITARY TIME			
Relinquished By/Signat	DATE / TIME	Received By/Signat	DATE / TIME
<i>D. Jester</i>	2-2-06 1630	locked drawer, Rm 14, Bldg. 3746	2-2-06 1630
Relinquished By/Signat	DATE / TIME	Received By/Signat	DATE / TIME
locked cabinet bldg 3746 Rm #16			
<i>Goldie Malt</i>	02-06-06 / 1500	<i>RZ Steffler R. J. Steffler</i>	2-6-06 / 1500
Relinquished By/Signat	DATE / TIME	Received By/Signat	DATE / TIME
<i>RZ Steffler R. J. Steffler</i>	2-6-06 / 1600	<i>Fed Ex</i>	
Relinquished By/Signat	DATE / TIME	Received By/Signat	DATE / TIME
Relinquished By/Signat	DATE / TIME	Received By/Signat	DATE / TIME
Relinquished By/Signat	DATE / TIME	Received By/Signat	DATE / TIME
Relinquished By/Signat	DATE / TIME	Received By/Signat	DATE / TIME
Relinquished By/Signat	DATE / TIME	Received By/Signat	DATE / TIME
Relinquished By/Signat	DATE / TIME	Received By/Signat	DATE / TIME
LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY:

DATE:

PRINT/SIGN NAME